# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
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The Technological Transition of the Nation's	)	GN Docket No. 12-353
Communications Infrastructure	ĺ	

## COMMENTS OF COMCAST CORPORATION

Comcast Corporation ("Comcast") and its affiliates hereby submit these comments to the Federal Communications Commission ("FCC" or "Commission") in response to the Public Notice released by the Wireline Competition Bureau in the above-captioned proceeding.<sup>1</sup>

### I. INTRODUCTION AND SUMMARY

The Commission's recently established Technology Transitions Policy Task Force was designed with the laudable goal of facilitating regulatory changes that will "best ensure that [the] nation's communications policies continue to drive a virtuous cycle of innovation and investment, promote competition, and protect consumers." Consistent with these objectives, the Commission should take actions designed to support the ongoing voluntary transition from Time Division Multiplexing-based ("TDM-based") to Internet Protocol-based ("IP-based") networks for voice services. To the extent that the record demonstrates that the "trial runs" proposed by

Pleading Cycle Established on AT&T and NTCA Petitions, GN Docket No. 12-353, Public Notice, DA 12-1999 (rel. Dec. 14, 2012).

FCC Chairman Julius Genachowski Announces Formation of 'Technology Transitions Policy Task Force', News Release, at 1 (rel. Dec. 10, 2012) ("Task Force News Release"), available at: <a href="http://transition.fcc.gov/Daily\_Releases/Daily\_Business/2012/db1210/DOC-317837A1.pdf">http://transition.fcc.gov/Daily\_Releases/Daily\_Business/2012/db1210/DOC-317837A1.pdf</a>.

Both the AT&T and National Telecommunications Cooperative Association ("NTCA") petitions focus primarily on issues associated with the transition from TDM to IP for voice services, and the Technology Transitions Policy Task Force was designed to "coordinate the Commission's efforts [on various subjects such as IP interconnection] with a particular focus on

AT&T would hasten this transition, the Commission should encourage such efforts by AT&T and others. Contrary to NTCA's suggestions, however, the Commission should not attempt to apply the legacy TDM regulatory regime to IP-based networks and should not impose any IP-to-IP interconnection rules on voice service providers at this time. The record in response to the intercarrier compensation reform rulemaking makes clear that such regulatory intervention into IP-to-IP interconnection arrangements would be premature and likely would have adverse consequences.

## II. THE COMMISSION SHOULD ENCOURAGE A TIMELY TRANSITION TO AN ALL-IP WORLD FOR VOICE

Comcast and other multiple system operators have invested billions of private capital dollars in advanced, IP-based networks that today deliver Voice over Internet Protocol ("VoIP") and high-speed Internet access services for residential and business consumers as well as non-switched transmission services needed by commercial customers. For providers that have made these pro-consumer investments in the IP architecture, the challenges caused by having to work with and around legacy TDM-based networks for the exchange of voice traffic are an ongoing problem. Comcast and other VoIP providers, for example, are forced to incur the costs and inefficiencies associated with establishing separate trunking facilities to carry traffic exchanged with legacy networks in TDM and converting IP traffic to TDM protocol and vice versa.

voice services." Task Force News Release at 1; Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, AT&T Inc., GN Docket No. 12-353 (Nov. 7, 2012) ("AT&T Petition"); Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution, GN Docket No. 12-353 (Nov. 19, 2012) ("NTCA Petition"). While the comments herein stress the need for careful regulatory restraint as the marketplace addresses these particular issues, it is important to emphasize even more strongly that any proposal that would involve FCC regulation of negotiated peering, transit, and other Internet interconnection arrangements would represent a dramatic and unwarranted departure from the Commission's consistent, long-standing, and successful deregulatory approach. See, e.g., Comments of Comcast Corporation, WC Docket No. 10-90, at 28-52

(Feb. 24, 2012) ("Comcast Comments").

To eliminate these unnecessary service arrangements, Comcast has long supported voluntary efforts to promote a rapid transition to an all-IP network for voice services. There is no credible evidence indicating that regulatory intervention is needed for this transition to take place. To the contrary, evidence submitted in last year's intercarrier compensation reform rulemaking makes clear that the transition already is underway, driven by the same marketplace forces that have fostered the rapid growth of the Internet.<sup>4</sup> Indeed, many service providers already are interconnecting their voice services on an IP-to-IP basis. All of these efforts – which may take various forms – should be supported. Accordingly, if the FCC concludes, based on the record developed in response to the Public Notice, that the "trial runs" AT&T proposes would contribute to the prompt transition to IP-based networks for voice services by all TDM network providers, AT&T and other incumbent local exchange carriers should be encouraged to proceed.

## III. THE COMMISSION SHOULD REJECT NTCA'S PREMATURE PROPOSAL TO IMPOSE A LEGACY TDM REGULATORY REGIME ON IP-BASED NETWORKS

NTCA's petition asks the Commission to commence a proceeding that would introduce needless delay and uncertainty into the ongoing emergence of an all-IP network. As a threshold matter, NTCA improperly uses as the starting point for its proposal the existing legacy rules,

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See, e.g., Comcast Comments at 19-25; Comments of AT&T, WC Docket No. 10-90, at 10, 20 (Feb. 24, 2012) ("AT&T Comments") ("[M]arket forces are driving IP networks to negotiate efficient exchanges of 'managed' traffic when necessary no less than those same market forces have driven them for decades to negotiate efficient exchange of 'best effort' traffic through Internet peering and transit agreements."); id. at 27; Comments of CenturyLink, WC Docket No. 10-90, at 37 (Feb. 24, 2012) ("CenturyLink Comments") ("Given that all carriers share the same incentives to migrate to next-generation networks as expeditiously as possible, there is no need for the Commission to develop rules that will distort the natural evolution to IP networks . . ."); Comments of the United States Telecom Association, WC Docket No. 10-90, at 7 (Feb. 24, 2012) ("USTA Comments") ("One of the hallmarks of the development of IP networks to date has been the ability of those networks to grow and thrive in the absence of regulatory mandates."); Comments of Verizon, WC Docket No. 10-90, at 12 (Feb. 24, 2012) ("Verizon Comments") ("The transition to IP networks and IP interconnections for voice traffic is underway.").

which were designed primarily for circuit-switched TDM networks owned by the historically dominant providers of voice services.<sup>5</sup> As Chairman Genachowski recognizes, however, "the ongoing changes in [the] nation's communications networks require a hard look at many rules that were written for a different technological and market landscape." Although NTCA claims that its proposal represents a "smart" approach to regulating IP-based networks, its reliance on last-generation regulations to frame the issues inevitably will lead to undesirable results.

The NTCA petition, in particular, asks the Commission to consider the extension of legacy TDM interconnection obligations to the provision of IP-based services. Among its suggestions, NTCA appears to recommend that the FCC prescribe the rates that providers should assess for the exchange of voice traffic between IP-based networks. The notion of assessing those costs is itself thorny and would raise a host of complex questions. For example, as Comcast has noted, it is unclear how transport costs and obligations would be assigned in an environment with marketplace participants of various sizes and geographic reaches and with costs that may bear no relationship to those that carriers bore on the public switched telephone network ("PSTN"). Nor is there any basis to replicate legacy subsidies from PSTN rates into the IP framework. But beyond that, as Comcast has explained, prescribing rates to govern IP arrangements instead of permitting marketplace forces to determine the terms under which IP-based traffic is exchanged could have significant adverse economic effects. The use of

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See, e.g., NTCA Petition at ii, 10 ("the Commission should maintain certainty by retaining and reasserting a firm and clear regulatory foundation").

<sup>&</sup>lt;sup>6</sup> Task Force News Release at 1.

NTCA Petition at 13-14.

<sup>8</sup> *Id*.

Comcast Comments at 24.

<sup>10</sup> *Id.* at 44-47.

prescribed rates could, for example, reduce or eliminate the parties' mutual incentives to share costs efficiently and could create opportunities for arbitrage.<sup>11</sup> That risk is particularly great where, as here, relationships are fluid and the subject of ongoing experimentation and innovation

As Comcast and others demonstrated in last year's comments, requests for regulatory intervention into IP-to-IP interconnection agreements for voice services are premature and likely would prove harmful, 12 especially given the very real possibility of regulatory slippage into oversight of IP interconnection – and thus the Internet generally – and the difficulties in line drawing to prevent that undesirable outcome. Nor is there any pressing need to balance out that risk: Evidence to date indicates that marketplace forces are causing traditional voice providers to upgrade their networks from TDM to IP and operators of modern VoIP networks to negotiate commercial IP-to-IP agreements. Government intervention at this point would introduce needless uncertainty among providers and deter them from maintaining the current pace of investment in broadband facilities. These ongoing initiatives also show that concerns that the

<sup>&</sup>lt;sup>11</sup> *Id*.

See, e.g., id. at 19-27; Comments of the Alaska Communications Systems Group, Inc., WC Docket No. 10-90, at 6 (Feb. 24, 2012) ("ACS Comments") ("It is far from clear that there is a need for FCC regulation of IP-to-IP interconnection."); AT&T Comments at 16 ("Any regulation of IP-to-IP interconnection on the basis of retail service classification (e.g., 'voice') would create massive regulatory uncertainty, turn back the clock on technological convergence, and increase the risk of foreign regulation of Internet peering and transit."); id. at 23-24; CenturyLink Comments at 39 ("[I]t would be premature for the Commission to adopt rules or otherwise assert additional jurisdiction over IP-to-IP interconnection. Such rules would likely skew the natural development of IP networks and the interconnection of those networks."); Comments of the Independent Telephone & Telecommunications Alliance, WC Docket No. 10-90, at 7 (Feb. 24, 2012) ("ITTA Comments") ("any steps the Commission may take to address IP interconnection in this or any other proceeding would be premature"); USTA Comments at 7 ("A regulatory mandate – even one that may seem innocuous . . . – will disrupt the transition to IP networks and harm consumers."); Verizon Comments at 21.

See, e.g., supra note 4.

emergence of ubiquitous IP voice networks somehow will lead to the end of universally available voice service for consumers at reasonable rates are misplaced or, at best, premature. The competitive pressures that are driving the conversion of traditional networks to IP also place downward pressure on prices. Further, and independently of this proceeding, the Commission has demonstrated a strong commitment to maintaining efficient universal service programs for high-cost areas where voice service is delivered via IP-based networks.

Moreover, regulating IP-to-IP interconnection for voice services likely would undercut the Commission's public interest goal of promoting efficient interconnection arrangements that meet the needs of the individual parties involved. As the United States Telecom Association has noted, "negotiated commercial agreements best serve the development of IP voice interconnection." Neither the Commission nor marketplace participants to date have gained enough real-world experience to understand how a regulatory regime for voice interconnection should operate in an all-IP world. The public interest would not be served by imposing the legacy Title II regulatory regime on the IP ecosystem instead of permitting industry standards-setting bodies and marketplace forces in the first instance to address and resolve technical and other issues as they arise. Instead, the Commission should continue to gather and

USTA Comments at 7.

See, e.g., Reply Comments of CenturyLink, WC Docket No. 10-90, at 18 (March 30, 2012) ("Commenters generally acknowledge that there are still numerous details that must be resolved by industry and individual providers to facilitate IP-to-IP interconnection."); Verizon Comments at 23 ("Because there is not yet a mature feature set for IP-to-IP interconnection for voice traffic, in each of these areas, interconnecting providers must reach agreement on the technical issues. Industry, not the Commission, is in the best position to work through the complicated, detailed requirements.").

See, e.g., ACS Comments at 6 (noting that the Technical Advisory Committee "is in the midst of evaluating what issues will arise as TDM-based networks are converted to IP" and urging the Commission to "refrain from adopting any new IP interconnection rules at this time"); CenturyLink Comments at 37 (urging the Commission to "allow time for industry and standard-setting bodies to develop efficient methods and practices" for IP interconnection);

analyze information about the diverse and evolving interconnection arrangements between VoIP providers, and the Technology Transitions Policy Task Force may provide a useful vehicle for conducting this ongoing analysis.

#### IV. CONCLUSION

For the foregoing reasons, the Commission should take actions that will promote the ongoing voluntary transition to a ubiquitous, all IP-based network for voice services.

Respectfully submitted,

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ITTA Comments at 7 ("Adopting regulatory mandates before industry standards have been established could force providers to develop a patchwork of carrier-by-carrier technical requirements that may not reflect a technologically-neutral marketplace.").